



**RBA**

REVOLUTION  
IN BUSINESS  
AFFAIRS



PRESENTATION TO:

**NAVY WORKING CAPITAL FUND**

**FINANCIAL MANAGEMENT CONFERENCE**

**21 FEBRUARY 2001**

**VADM J. DYER  
COMMANDER  
NAVAL AIR SYSTEMS COMMAND**

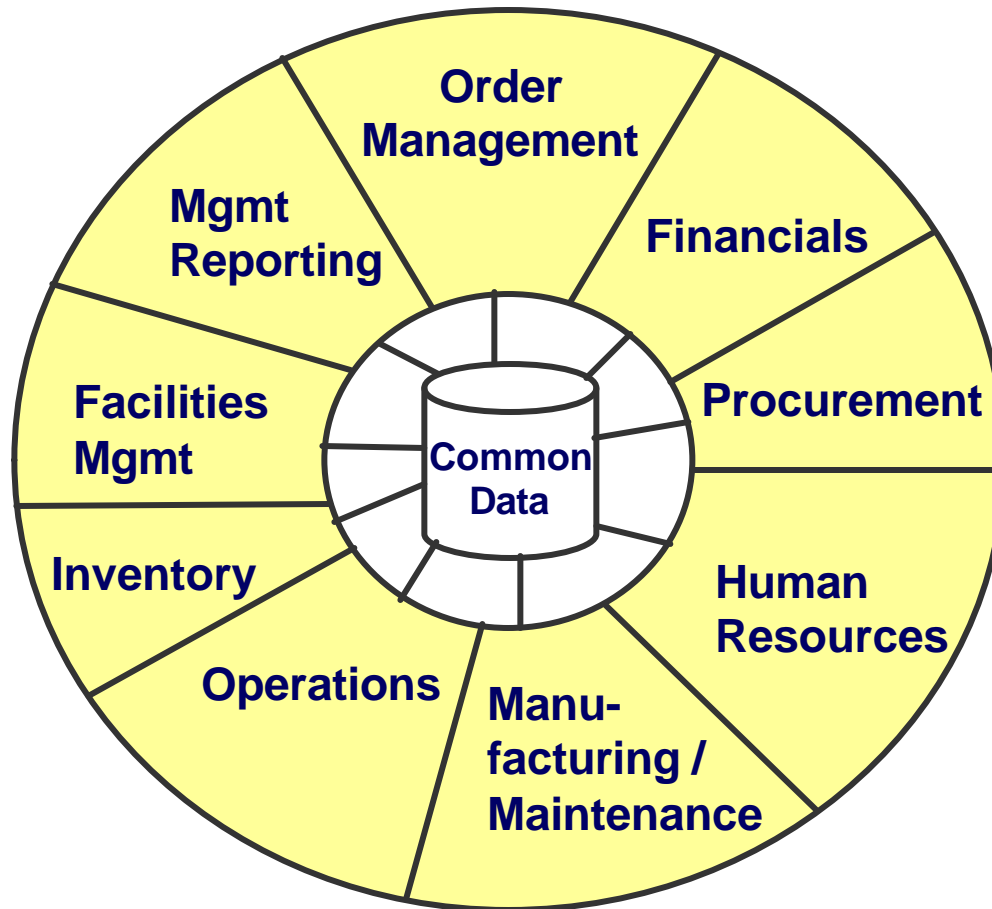


# **REVOLUTION IN BUSINESS AFFAIRS VISION**

**“DON will use the best business practices  
(commercial or public) and  
supporting architectures (ERP approach)  
to make informed decisions  
(right info to the right people at the right time).”**

# WHAT IS ERP ?

**Revolutionary  
change in  
business  
processes for  
dramatic  
improvements**



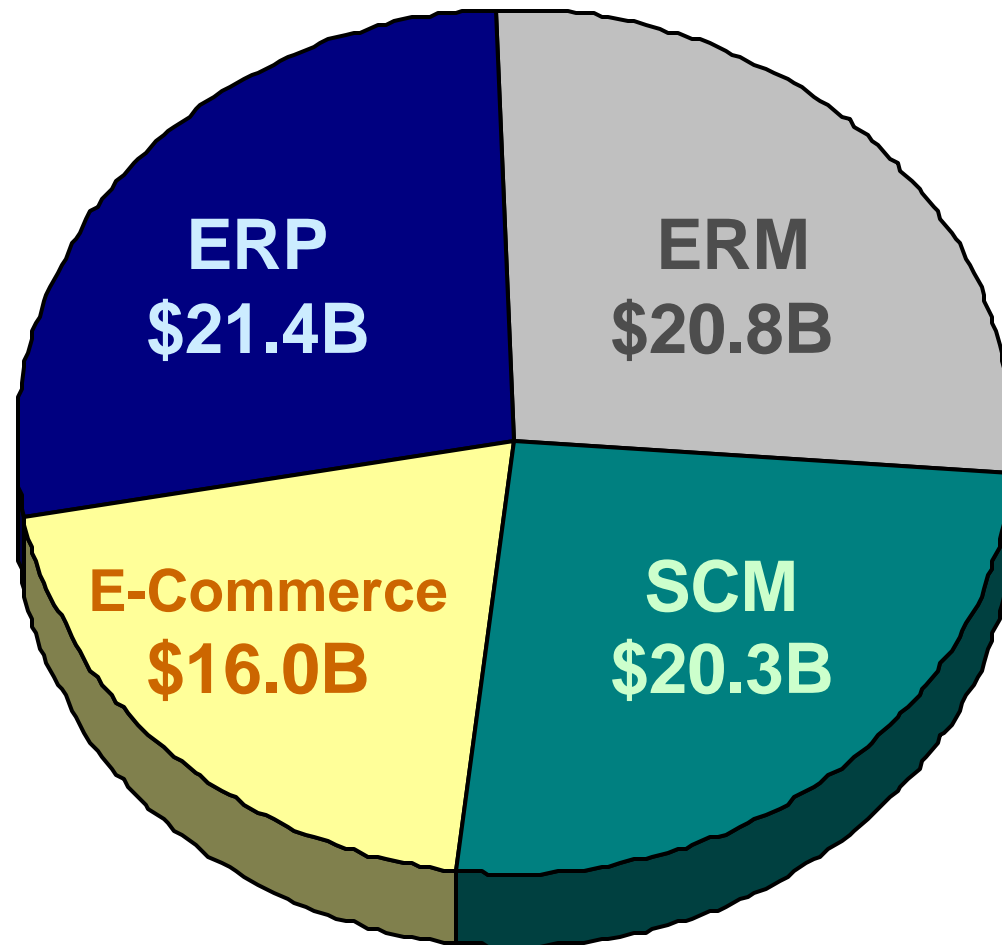
**The integration of  
business processes  
that optimize  
functions across  
the enterprise  
(e.g., supply  
chain, finance,  
manufacturing /  
maintenance, HR  
etc.)**

**ERP solutions provide consistent, complete, relevant,  
timely & reliable information for decision making**



# ENTERPRISE APPLICATION MARKET

## EXPECTED GROWTH TO \$78.5 BILLION BY 2004



ERP - Enterprise Resource Planning  
ERM - E-Business Relationship Management  
SCM - Supply Chain Management  
E-Commerce - Electronic Commerce

Source: AMR Research, June 2000



# ERP MARKET GROWTH TREND FORECAST 1999 TO 2004



Source: AMR Research, June 2000  
Gartner Research, January 2001



# WHO HAS DONE ERP?

## America's Most Successful Companies:

7 of 10 of Most Profitable

9 of 10 with Highest Market Value

7 of top 10 Pharmaceutical Companies

7 of Top 10 Computer Companies

7 of Top 10 Petroleum Companies

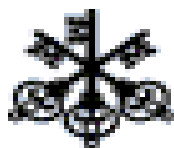
6 of Top 10 Electronic Companies

8 of Top 10 Chemical Companies

8 of Top 10 Food Companies



**BAUSCH  
& LOMB**



**BASF**

**Circuit City**



**COMPAQ**



**BGE**





# ERP OBJECTIVES

- **Federal financial standards compliance**
- **COTS solutions**
- **Best business practices**
- **Single data entry at source**
- **End-to-end process connectivity**
- **Data commonality**
- **Internal management orientation**



# ERP

- **Revolution in Business Affairs (RBA) WG recommended ERP as a way to reduce operations and business cost using best business practices / processes for the Navy**

*“Give priority to investments that will cut our operating or business costs, such as Enterprise Resource Planning (ERP) and the Navy-Marine Corps Intranet (NMCI)”*

*Secretary of the Navy  
Richard Danzig  
10 August 1999*

- **RBA sponsoring 4 Navy ERP pilots structured to demonstrate and evaluate different DON functional requirements**
  - NAVAIR - Program Management (SIGMA)
  - NAVSUP/NAVAIR - Aviation Supply Chain / Maintenance Management (SMART)
  - SPAWAR - Warfare Center Management (Cabrillo)
  - NAVSEA / CLF - Regional Maintenance (Nemais)
- **ERP enables**
  - Integrated Naval Aviation value chain - reduced inventory levels and AVDLR costs
  - Automate and integration business processes
  - Share common data and process across entire organization - reduces legacy systems and costs
  - Provide consistent information for improved decision-making and performance metric - reduced non-value work
  - Provide total cost visibility across Department

# ERP PROGRAMS

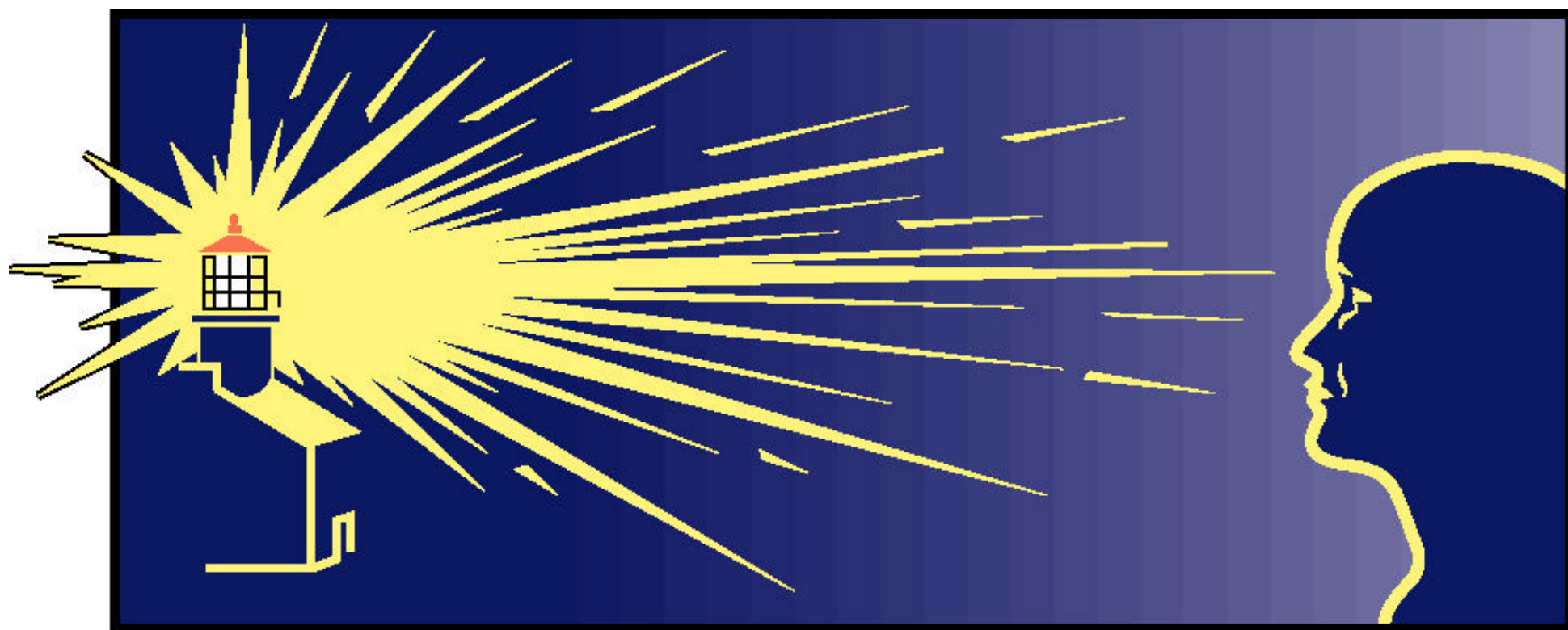


# NAVY ERP PILOTS

Pilot	Sponsor	Explore ERP Business Processes to Improve:	Core S/W
<b>Program Management (SIGMA)</b>	<b>NAVAIR</b>	<b>Program Management Process to include linkage between contracting and financial systems</b>	<b>SAP</b>
<b>Warfare Center Management (CABRILLO)</b>	<b>SPAWAR</b>	<b>NWCF Financial Management Process</b>	<b>SAP</b>
<b>Aviation Supply Chain / Maintenance Management (SMART)</b>	<b>NAVSUP / NAVAIR</b>	<b>Maintenance Planning and Material Ordering Processes (O, I, D level and NAVICP)</b>	<b>SAP</b>
<b>Regional Maintenance (NEMAS)</b>	<b>NAVSEA / CLF</b>	<b>Workforce Management Process</b>	<b>SAP</b>

- 4 Approved and Funded Pilots
- Each pilot is 12 - 18 months
- NAVAIR and NAVSUP / NAVAIR Pilots use E-2 data as “proof of concept”

SPAWAR NAWC NSWC NADEP NAVAUD DFAS



**P R O J E C T   C A B R I L L O**



# **ERP TOP LEVEL OBJECTIVES**

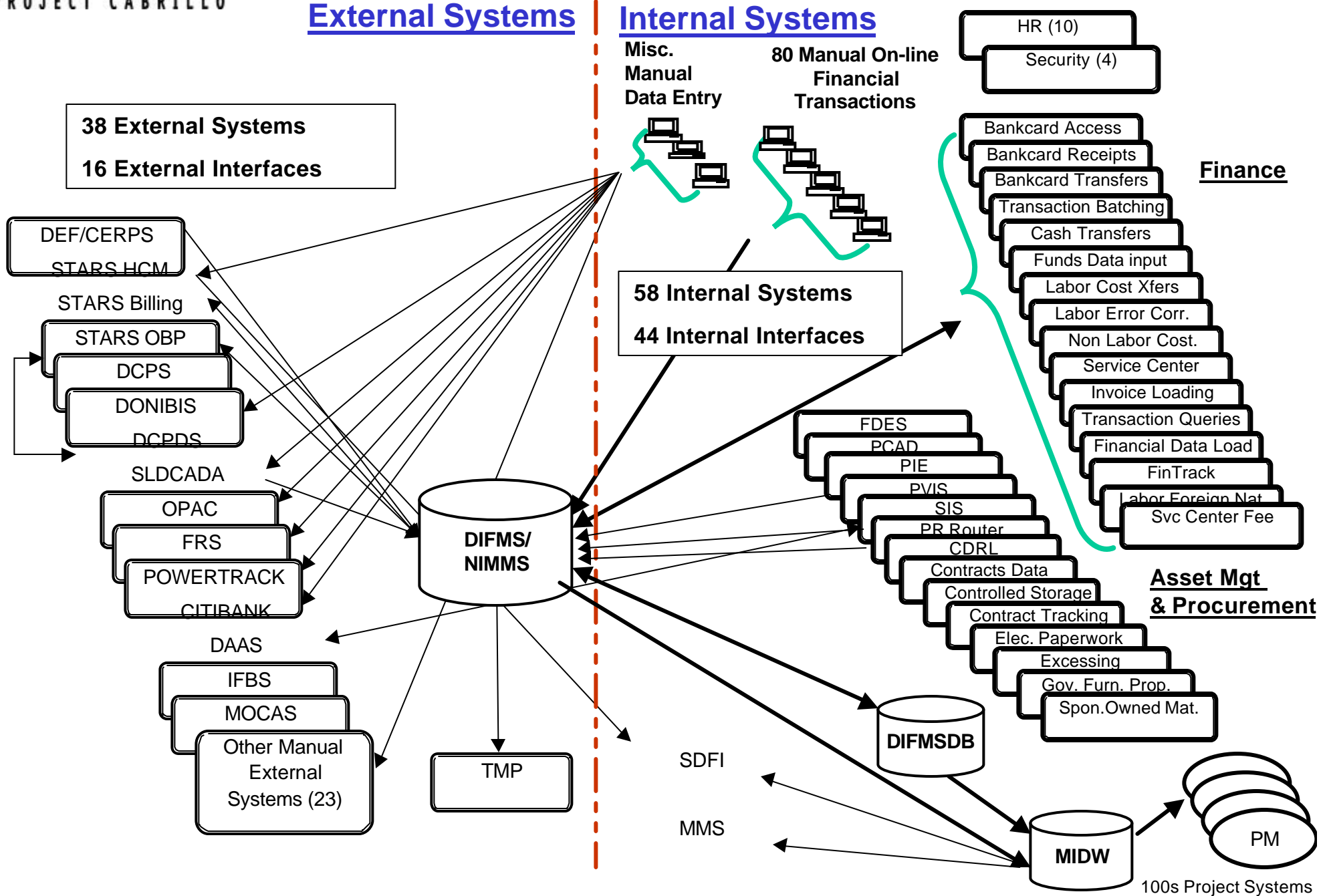
- **Eliminate existing internal business systems and interfaces to the maximum extent possible (esp: financial feeders)**
- **Single source data entry while eliminating data redundancy and improving data integration**
- **CFO Compliance (auditable information to the transaction level; JFMIP / USSGL)**
- **Provide Navy Management an order of magnitude improvement in business information with an associated significant reduction of infrastructure costs**



# “AS IS” LANDSCAPE

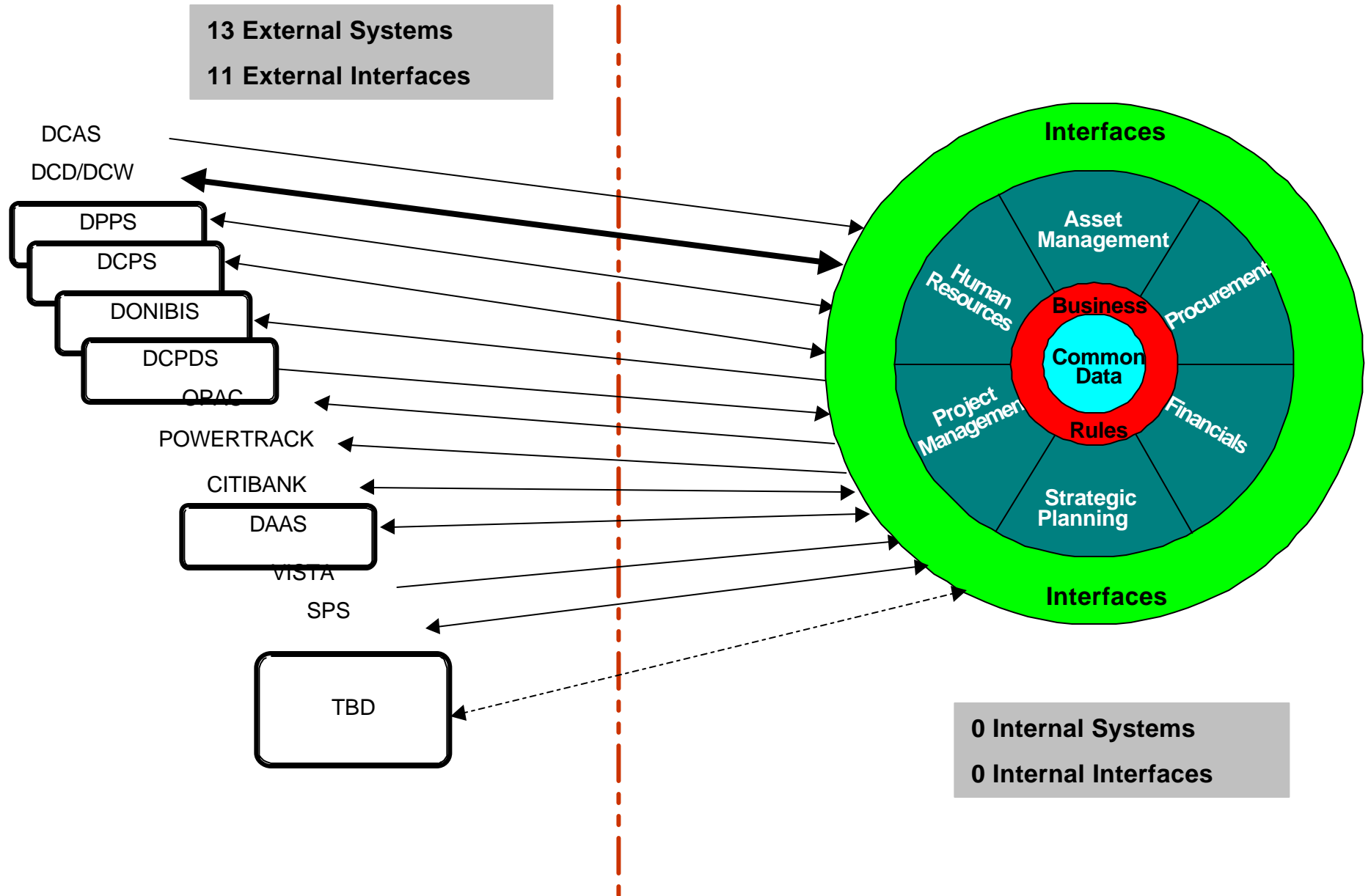
## External Systems

## Internal Systems





# END STATE VIEW





# PROJECT DESCRIPTION

- **Core Business Functional Areas**

- Financial Management
  - **All financial activities including budgets, funds management, billings, payables, reporting and employee data**
- Procurement Management
  - **All buying activities for MRO items, from issuing PO, receipt of goods and processing vendor invoices**
- Asset Management
  - **Includes both real property and improvements. Tracks all assets from acquisition to disposal.**
- Project / Program Management
  - **Fully integrated project management system that ties together project management tools with finance, budgeting, procurement and asset management data**
- Strategic Management
  - **Planning and budgeting tool for both annual and long range planning. Will build upon annual budgeting / planning needs to develop a long range orientation for SSC-SD.**

# *Naval Supply Systems Command*

## *Naval Air Systems Command*



Supply Maintenance Aviation Reengineering Team



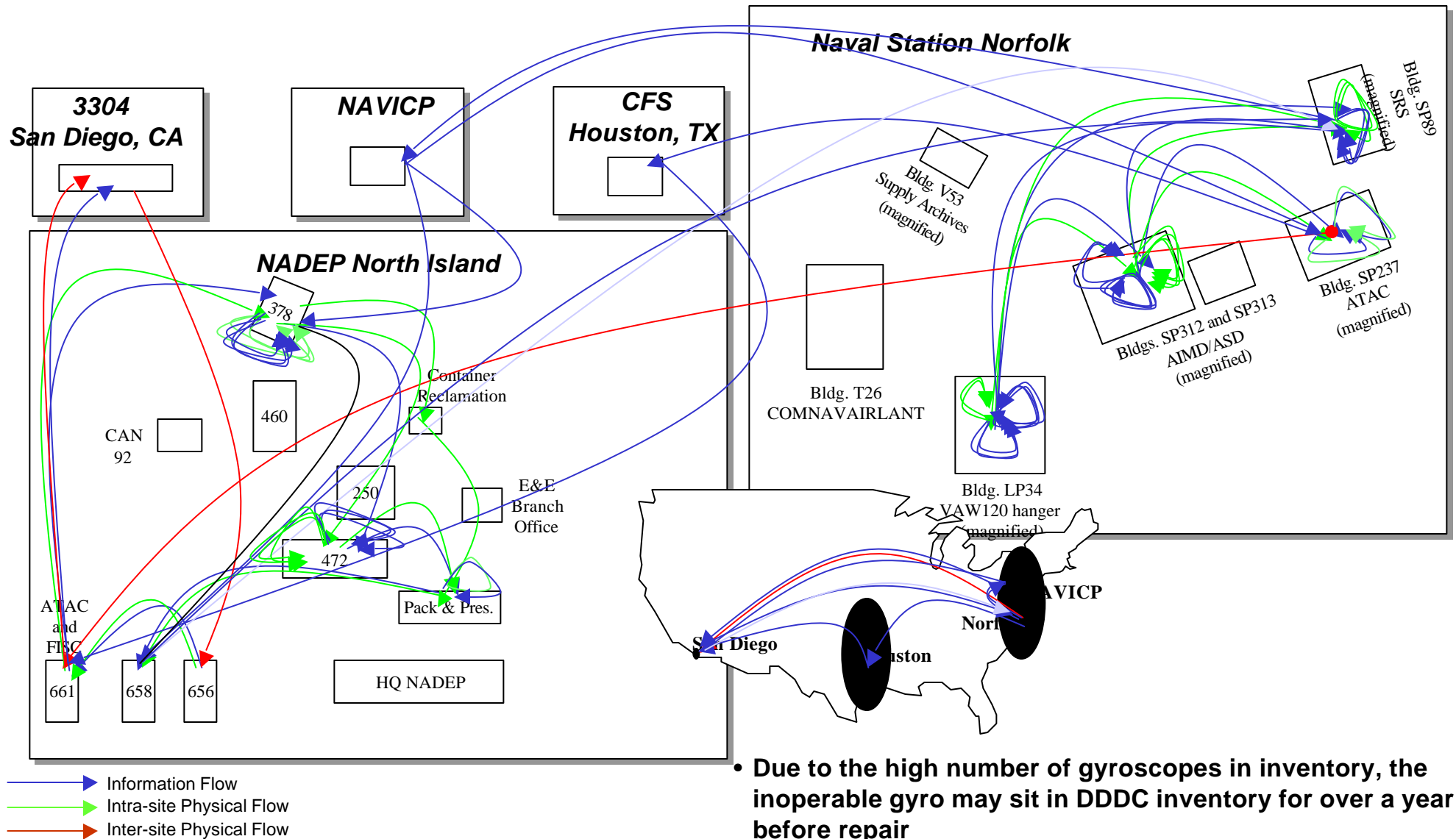
# SMART OVERVIEW

- **Jointly sponsored by NAVSUP and NAVAIR**
  - Phase I Study. . . Phase II Pilot. . . Phase III Enterprise Roll-out
- **E-2C Hawkeye I-Level maintenance with NALCOMIS OOMA and Depot interfaces**
  - E-2C Airframe, components (not including T-56 engine)
  - Activities. . . VAW-120, AIMD/ASD Norfolk, FISC Norfolk / San Diego, NADEP North Island
- **LM-2500 Gas Turbine Engine (interfaces to D-Level maintenance)**
  - Modules and components
  - Activities. . . NADEP North Island





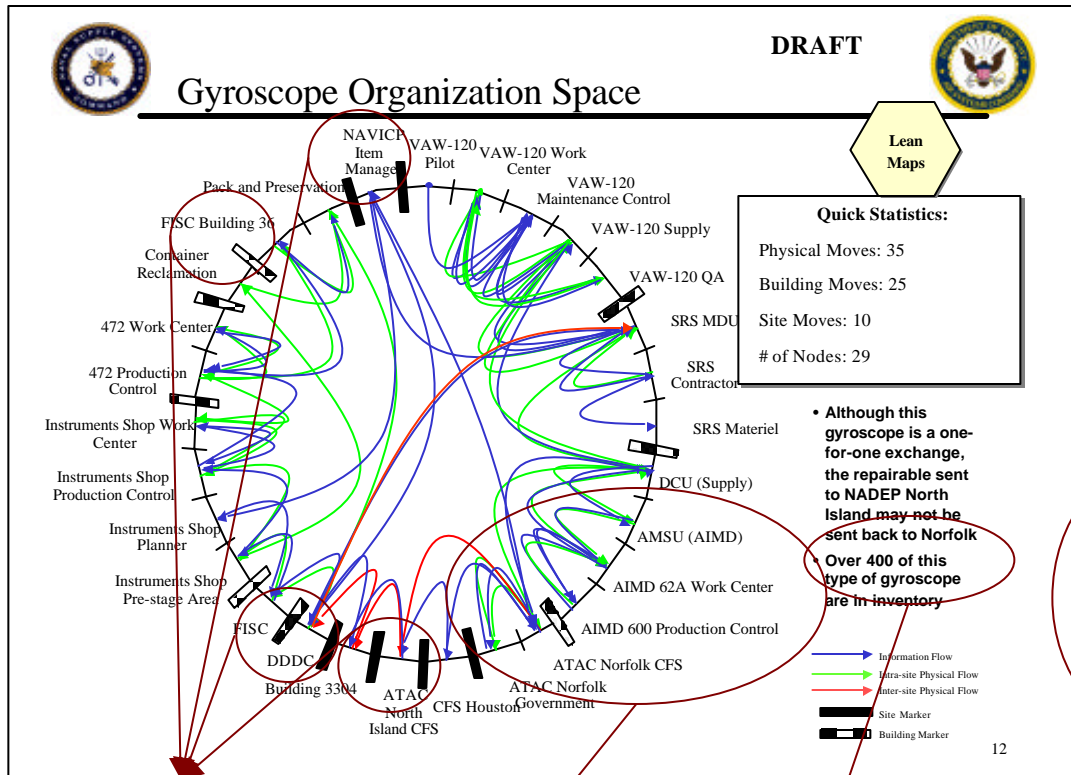
# PROCESS REENGINEERING: TRACING A GYROSCOPE REPLACED BY VAW-120



- Due to the high number of gyroscopes in inventory, the inoperable gyro may sit in DDDC inventory for over a year before repair
- This type of gyroscope is kept in local supply at Norfolk



# WHERE WE'VE BEEN ... LEAN MAPPING

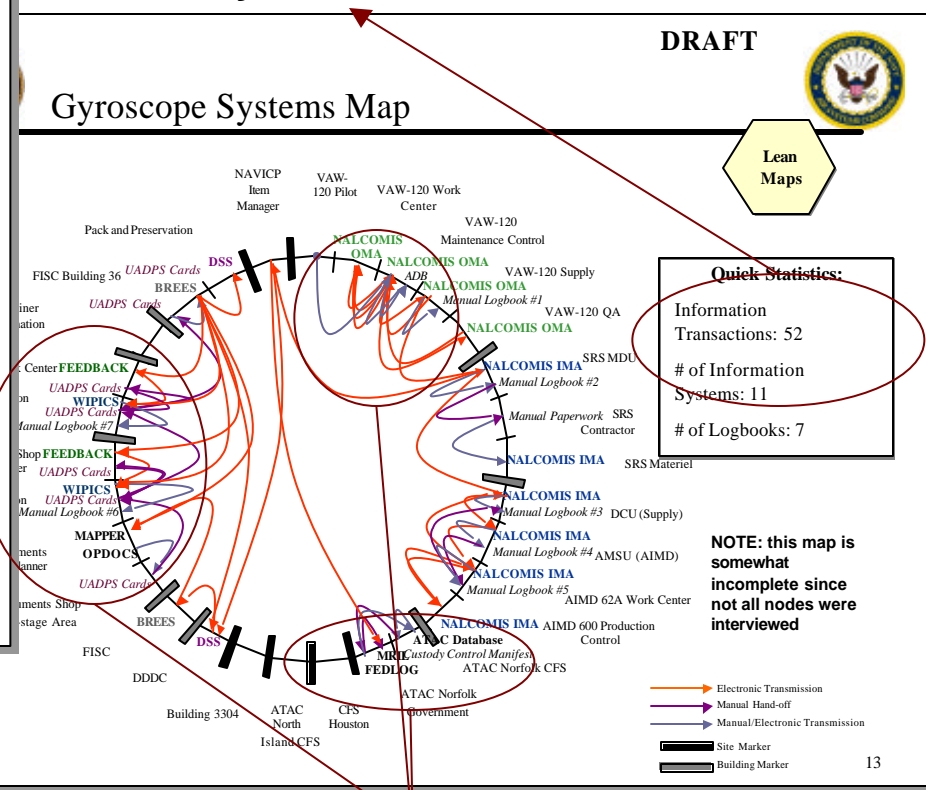


**Multiple organizations involved in the same process reduces accountability**

**Long cycle times due to multiple hand-offs**

**High inventory levels**

**Lack of timely, accessible information for reporting and analysis**



**Lack of visibility into asset status or configuration**

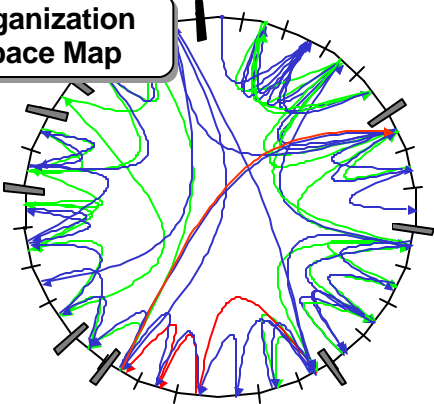
**Stakeholders must deal with process complexity and competing organizational objectives**



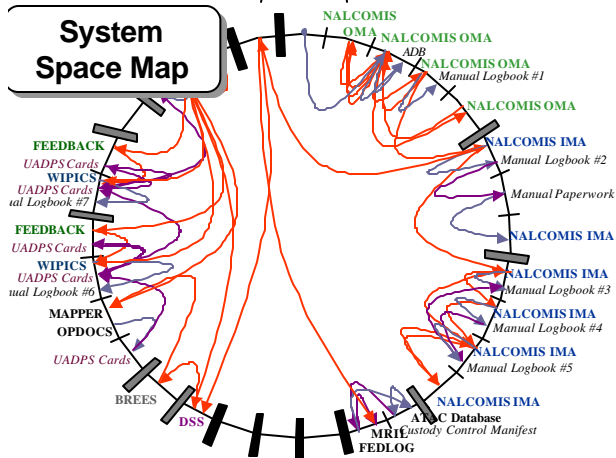
# WHERE WE GO... LEAN MAPPING

## Current State

Organization Space Map



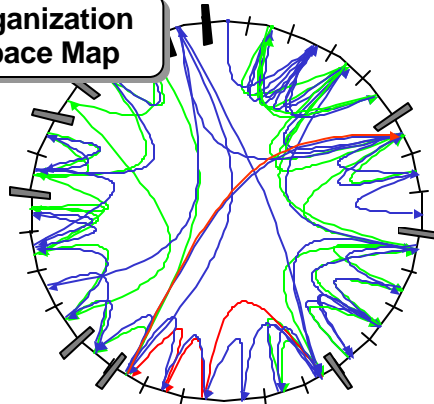
System Space Map



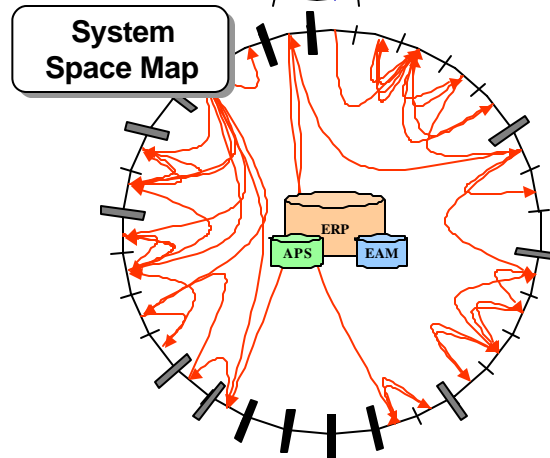
- 35 physical moves
- 29 organizations
- 52 information transactions
- 11 systems/7 logbooks

## System Enhancement

Organization Space Map



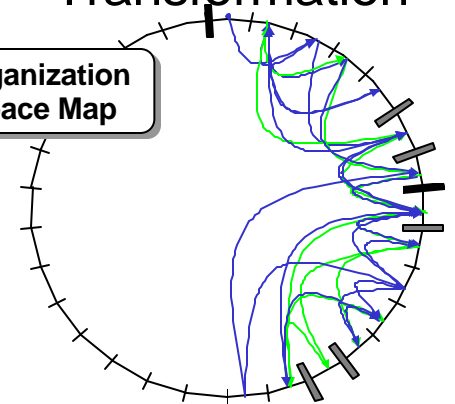
System Space Map



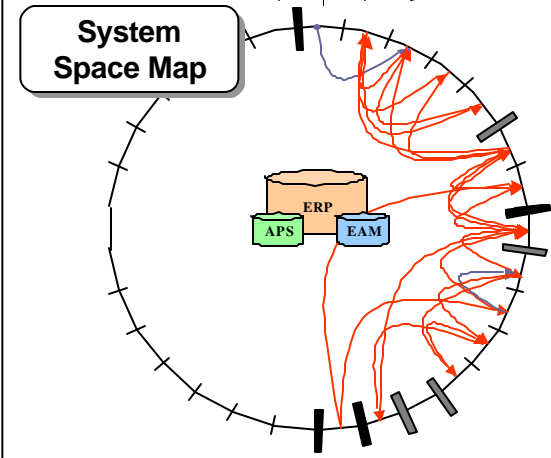
- 35 physical moves
- 29 organizations
- 42 information transactions
- 1 system

## Enterprise Transformation

Organization Space Map



System Space Map



- 15 physical moves
- 15 organizations
- 23 information transactions
- 1 system

NAVAL AVIATION SYSTEMS

# Sigma Project

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*Bringing the NAVAIR TEAM  
together through ΣRP*



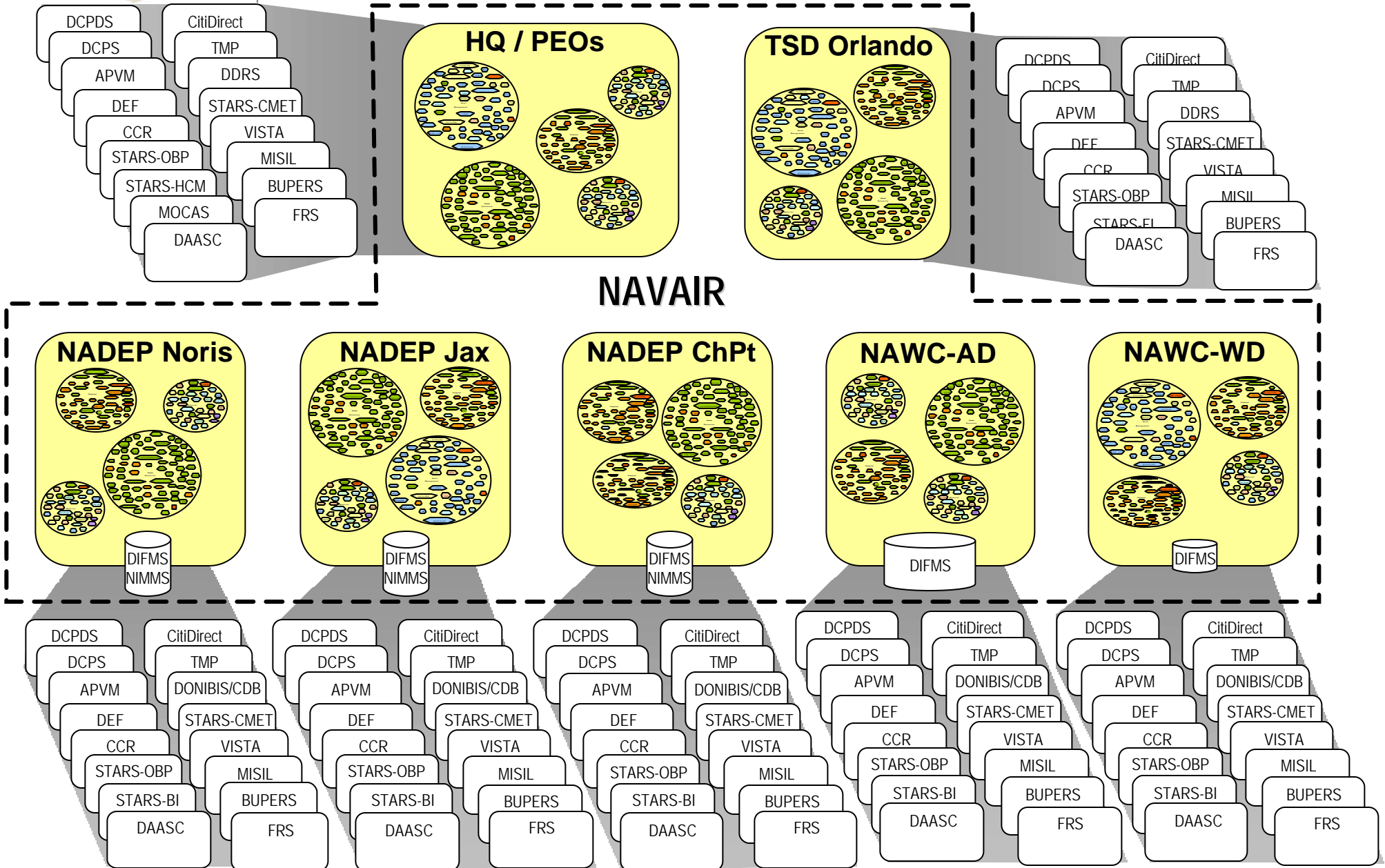
# PROGRAM MANAGEMENT PILOT SUMMARY

- **Program Management Functional requirements:**
  - Planning and Scheduling
  - Financial Management
  - Human Resource Management
  - Configuration Management / Asset Tracking
  - Limited Procurement
- **NAVAIR business processes will be reengineered within the bounds of SAP's best commercial practices**
- **Best practices, not current practices, will be implemented**
- **The SAP software will be implemented with no code modifications**

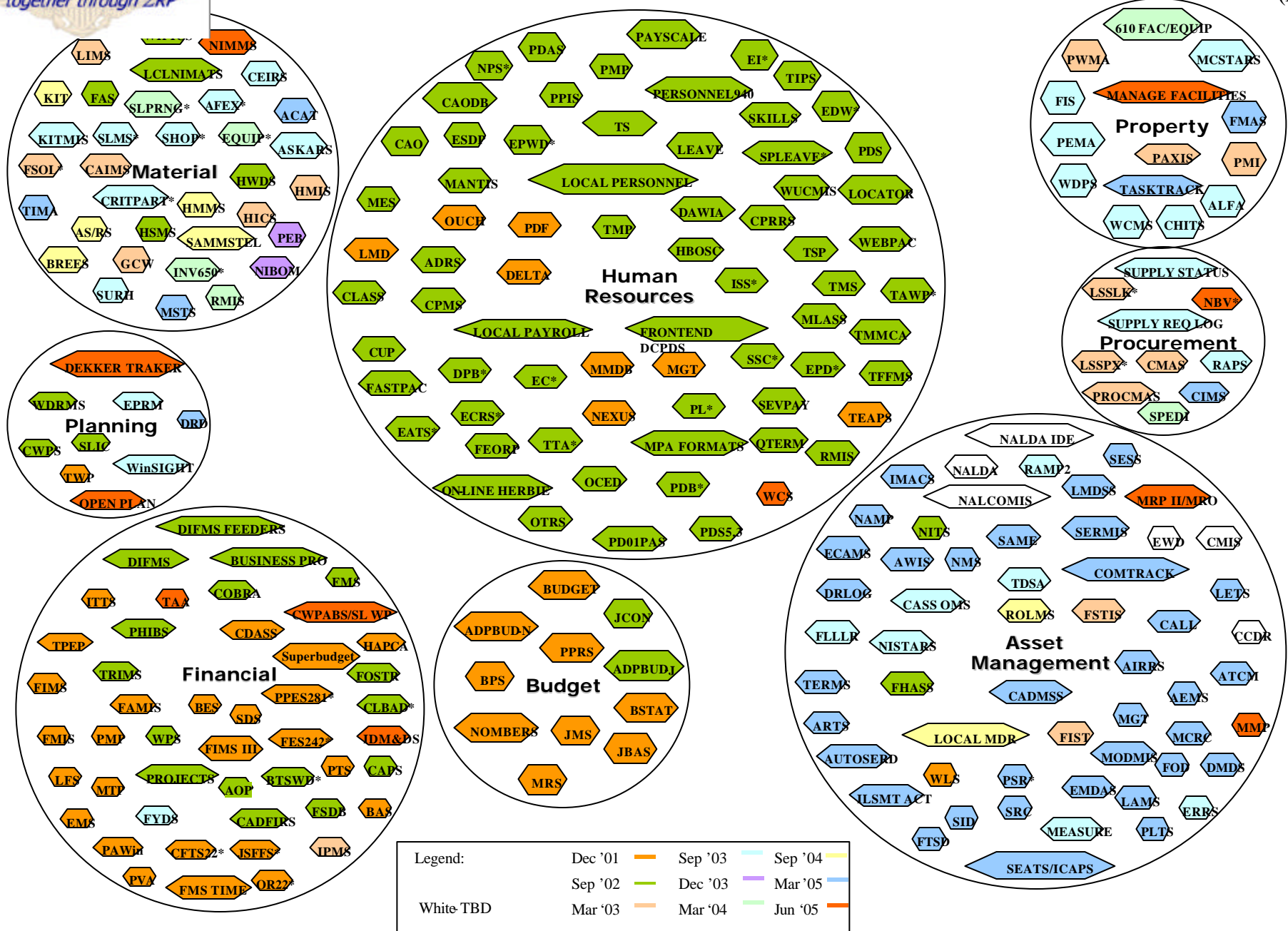
# WHAT WILL THE PILOT PROVE?

- ***Ability for program managers to budget, plan, track execution, and measure performance across the TEAM***
- ***Ability to track configuration and assets across the Navy***
- ***Better cost visibility and more agile execution***
- ***Ability to track financial execution across the general fund and NWCF***
- ***Document tracking for milestone decision preparation (i.e. APB,ORD, MNS, TEMP etc.)***
- ***Fixed assets management (depreciation for NWCF)***
- ***Ability for management to roll up financial performance and asset visibility***
- ***Ability to order MILSTRIP***
- ***Ability for planning work, capacity loading, and schedules with the Competencies (workforce planning out of HR module; TBD)***
- ***Supports Employee self-service (Locator, RED info , Etc. )***
- ***Reduces turn around time for time sheet adjustments***
- ***Verifies that the three company code structure supports the team financial requirements***

# NAVAIR "AS IS" BUSINESS SYSTEMS

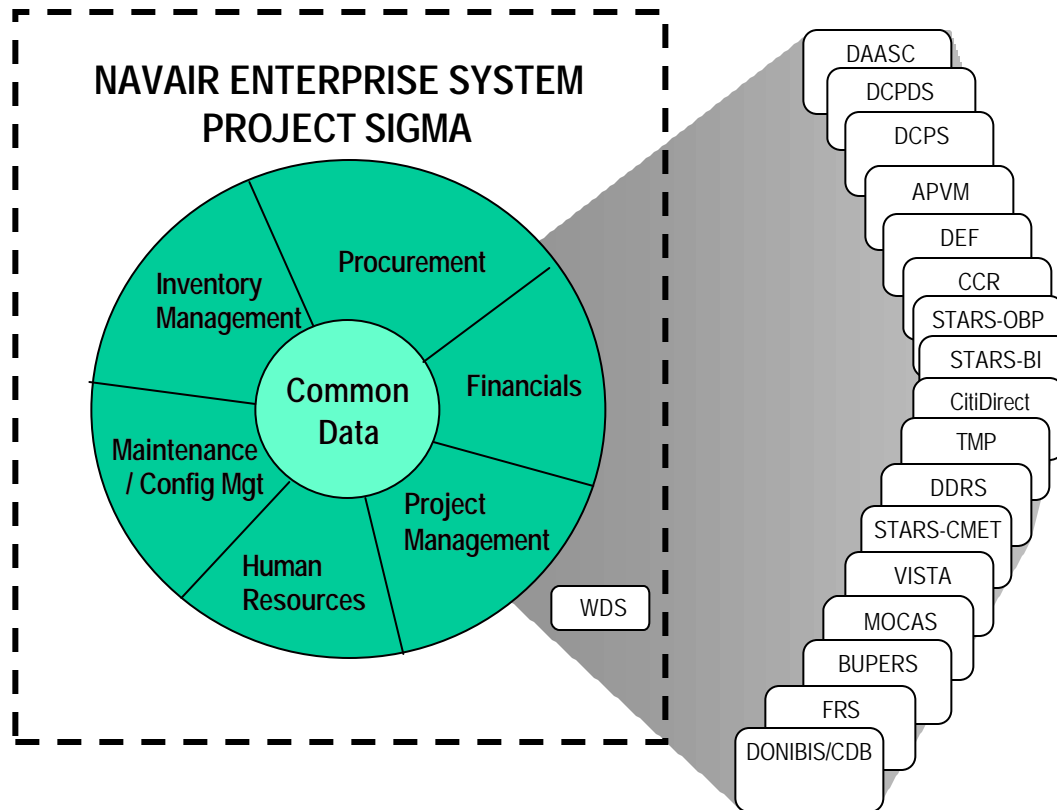


# NAVAIR LEGACY SYSTEM RETIREMENT MAP



(Notional  
ERP  
Related)

# NAVAIR “TO BE” BUSINESS SYSTEMS



# PILOT IMPLEMENTATION METHODOLOGY

**Feb '00**

**Apr '00**

**Jul '00**

**We are here**

**Nov '00**

**Apr '01**

## Project Preparation

- ✓ Kick-Off Meeting
- ✓ Define Objective & Success Criteria
- ✓ Finalize Project Infrastructure
- ✓ Plan Technical Strategies
- ✓ Develop Technical Strategies
- ✓ Mobilize Project Team
- ✓ Conduct Project Team
- ✓ Milestone Review

## Business Blueprint

- ✓ Establish Technical Environment
- ✓ Conduct Project Team Training
- ✓ Prepare Development Environment
- ✓ Define Business Processes
- ✓ Prepare for Design
- ✓ Define High Level Business Requirements
- ✓ Finalize Project Scope
- ✓ Finalize Detailed Project Plans
- ✓ Milestone Review

## Realization

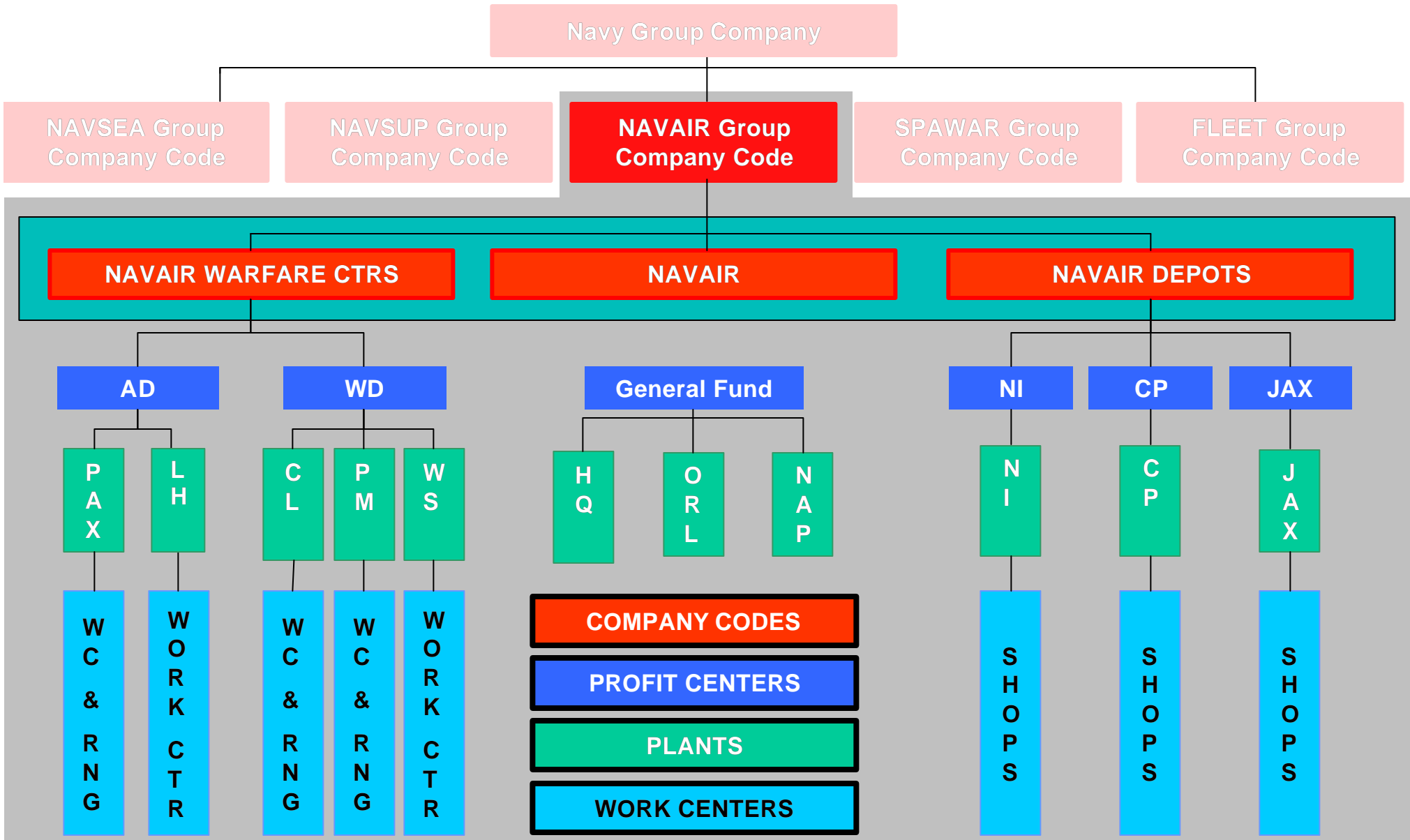
- ✓ Perform Configuration Training
- ✓ Customize Baseline Configuration
- ✓ Design and Customize Final Configuration
- Design and Construct Conversions, Interfaces, Enhancements, Reports, Security
- ✓ Milestone Review

## Pilot Integration Testing and Demonstration

- ✓ Prepare for Integration Testing
- Conduct Integration Testing
- Conduct Volume and Stress Testing
- Perform End User Training
- Milestone Review

- Future Task
- ✓ Complete
- In Progress

# BUSINESS & FINANCIAL ORGANIZATIONAL STRUCTURE





# Regional Maintenance ERP (NEMAIS) A Joint Fleet – NAVSEA Initiative



# NAVY ENTERPRISE MAINTENANCE

**Improve Combat Readiness**

**Improve Sailor Working Conditions**

**Reduce Life Cycle Cost**

**By . . .**

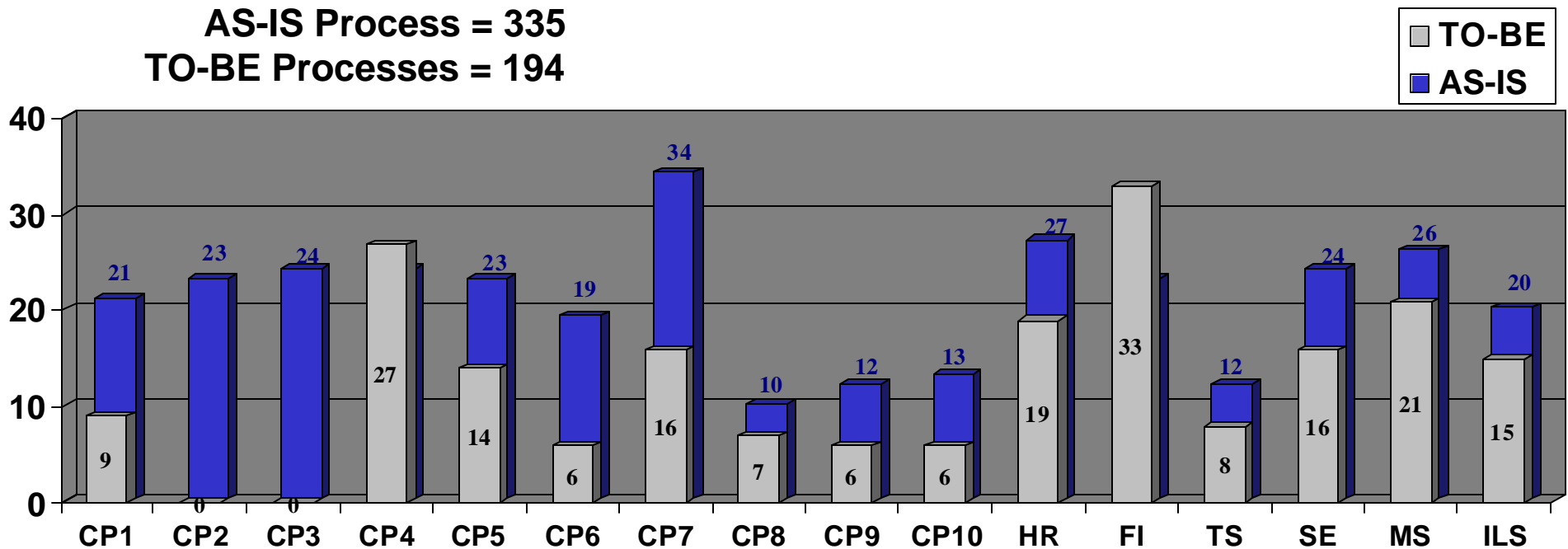
- **Providing timely and rapid access to information**
- **Supporting total asset visibility**
- **Enhancing the planning and scheduling process**
- **Providing better decision making tools**
- **Reducing the total cost of ownership**
- **Minimizing and simplifying data collection**



# NAVY MAINTENANCE PROCESS (BUS 01)

## “AS-IS” TO “TO-BE” COMPARISON

AS-IS Process = 335  
TO-BE Processes = 194

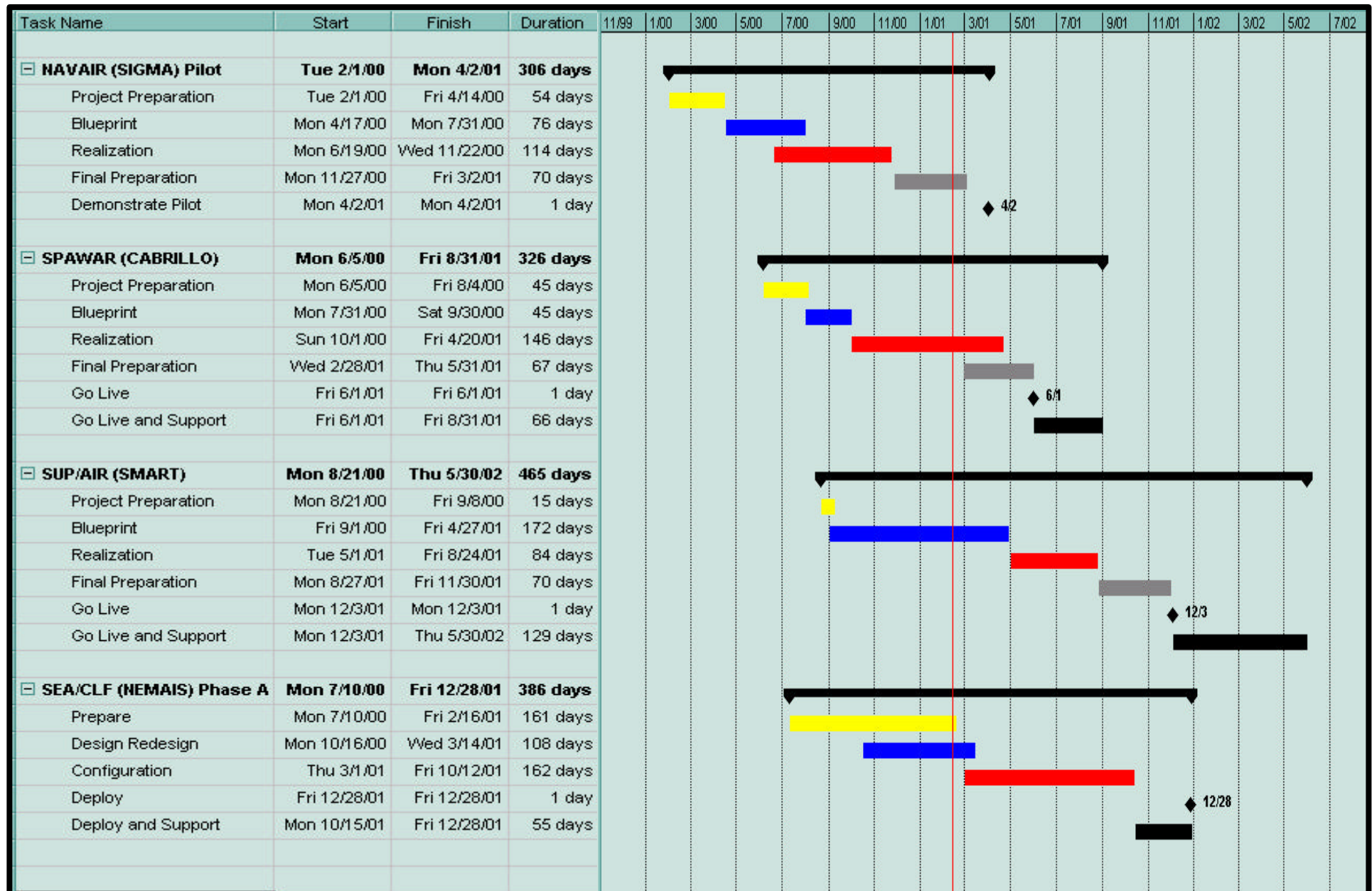


CP1 Document Work  
CP2 Validate Work  
CP3 Screen Work  
CP4 Plan Work / Estimate Work  
CP5 Integrate and Schedule Work  
CP6 Release Work  
CP7 Execute Work  
CP8 Integrated Work Testing

CP9 Work Validations Cert. Records Mgmt  
CP10 Data Feedback  
HR Manage Human Resources  
FI Manage Finances  
TS Manage Engineering Support  
SE Manage Support Equipment  
MS Manage Material Support  
ILS Manage Integrated Logistic Support

# **SCHEDULES**

# CONSOLIDATED PILOT TIMELINE



#### *ICB Members*

**Ms. Iona Evans**  
ERP Corporate Executive  
Naval Sea Systems Command

**Mr. Mike Petz**  
Program Manager - NETS  
Naval Sea Systems Command

**Mr. Dennis Distler**  
Enterprise Solutions Program  
Office (ESPO) Executive Director  
Naval Air Systems Command

**Mr. Kevin Fitzpatrick**  
Co-Program Manager - SMART  
Naval Supply Systems Command

**Mr. John Wenke**  
Co-Program Manager - SMART  
Naval Air Systems Command

**Mr. Rick Pierson**  
Program Manager - CABRILLO  
SPAWAR Systems Center - San Diego

#### *ICB Staff*

**Mr. Greg Huntington**  
ESPO - SIGMA  
Naval Air Systems Command

**Mr. Stan Beiter**  
SMART  
Naval Supply Systems Command

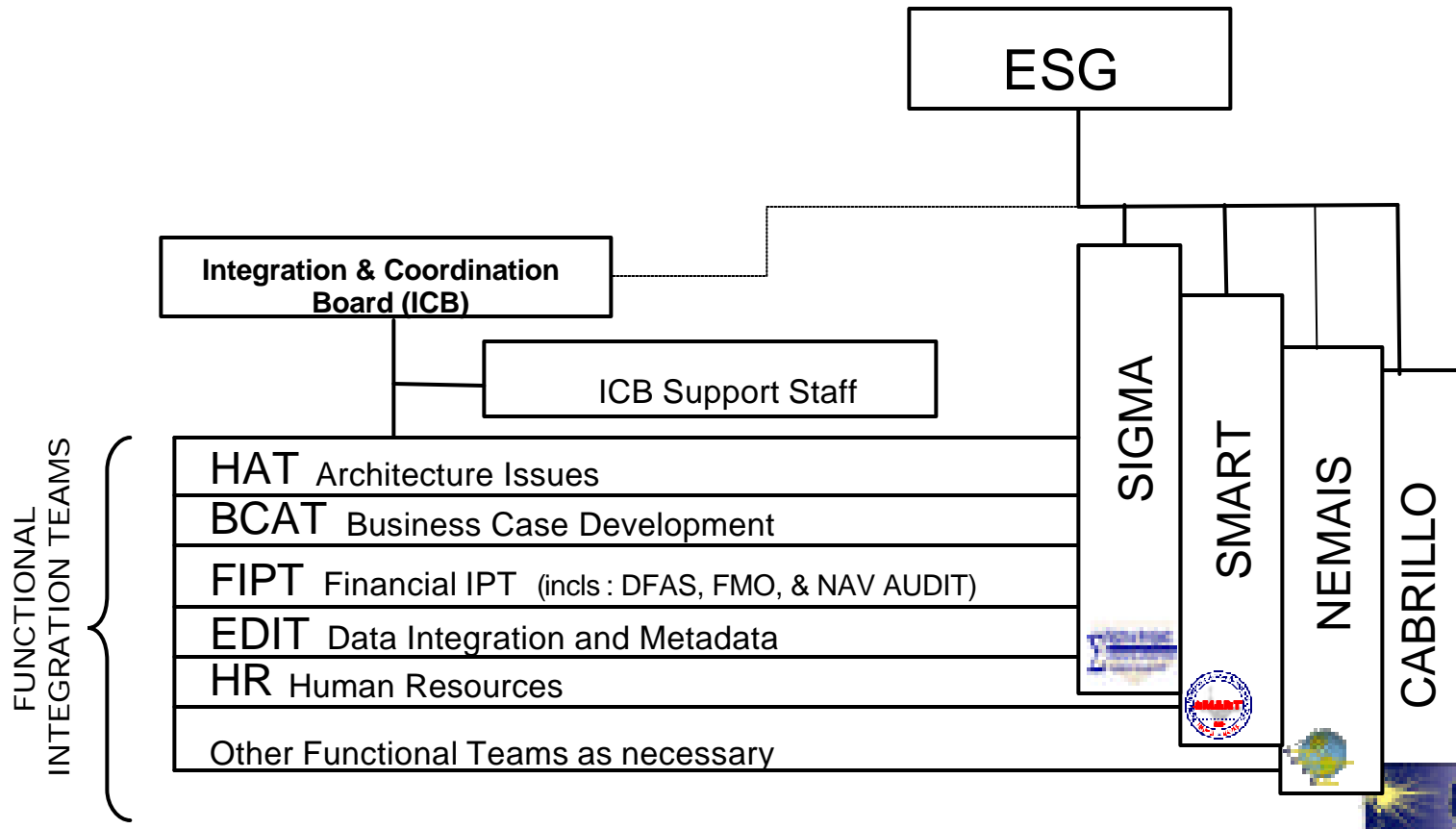
**Mr. Dave Noble**  
ERP Corporate Office  
Naval Sea Systems Command

**Ms. Gale Pennoyer**  
CABRILLO  
SPAWAR Systems Center - San Diego

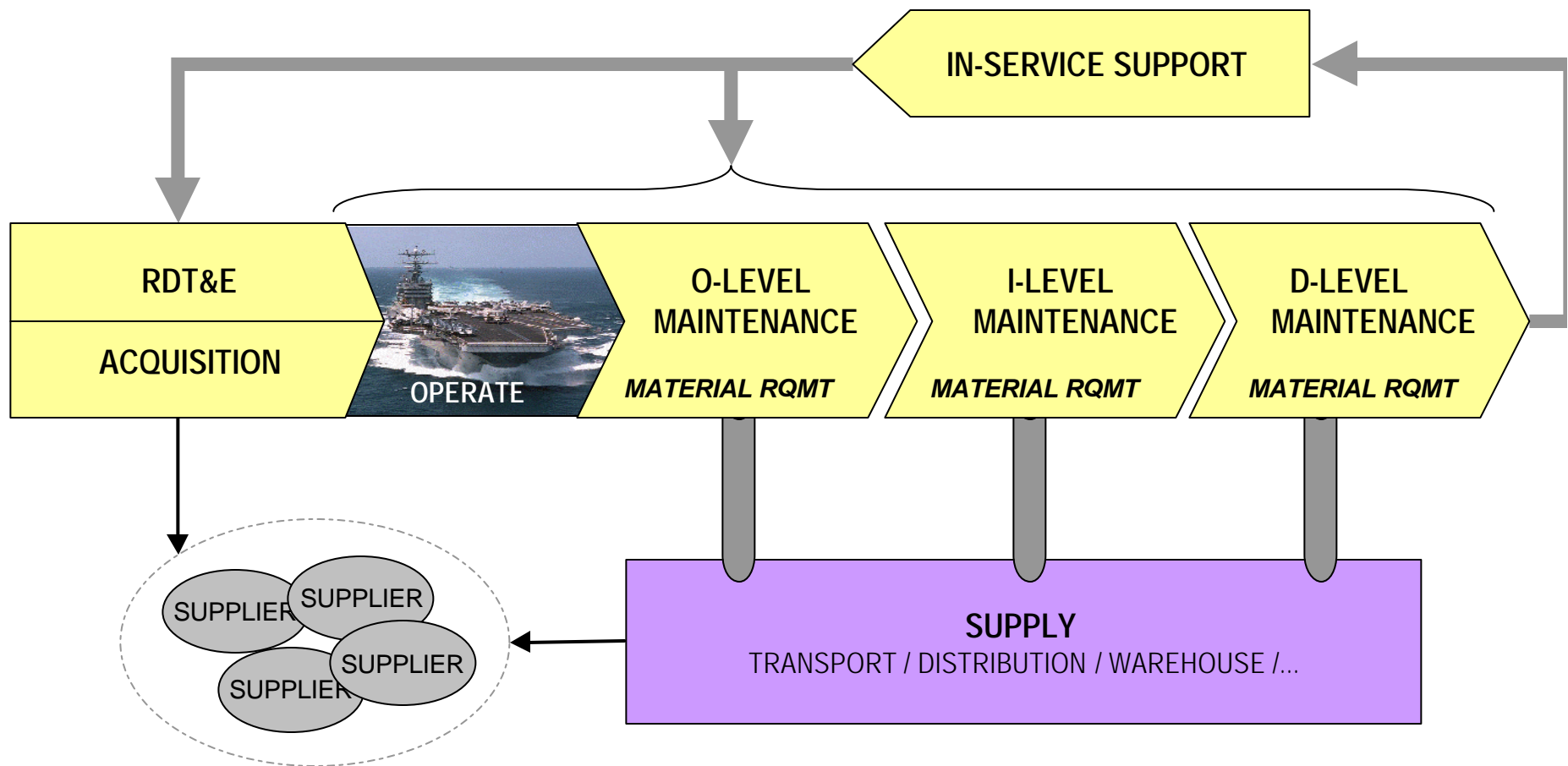
# Integration and Coordination Board (ICB)



# ICB INTEGRATION TEAM STRUCTURE

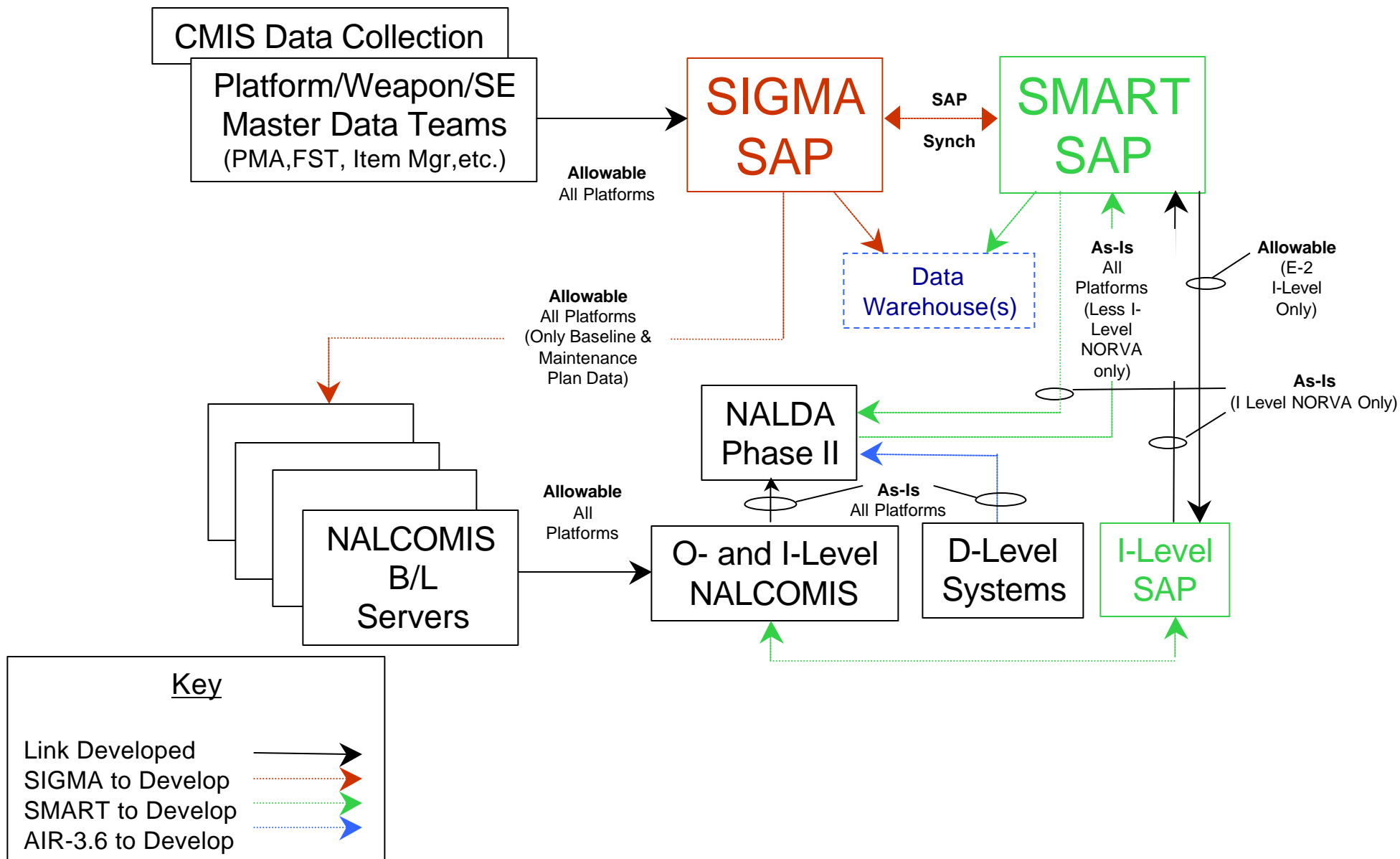


# NAVAL AVIATION VALUE CHAIN



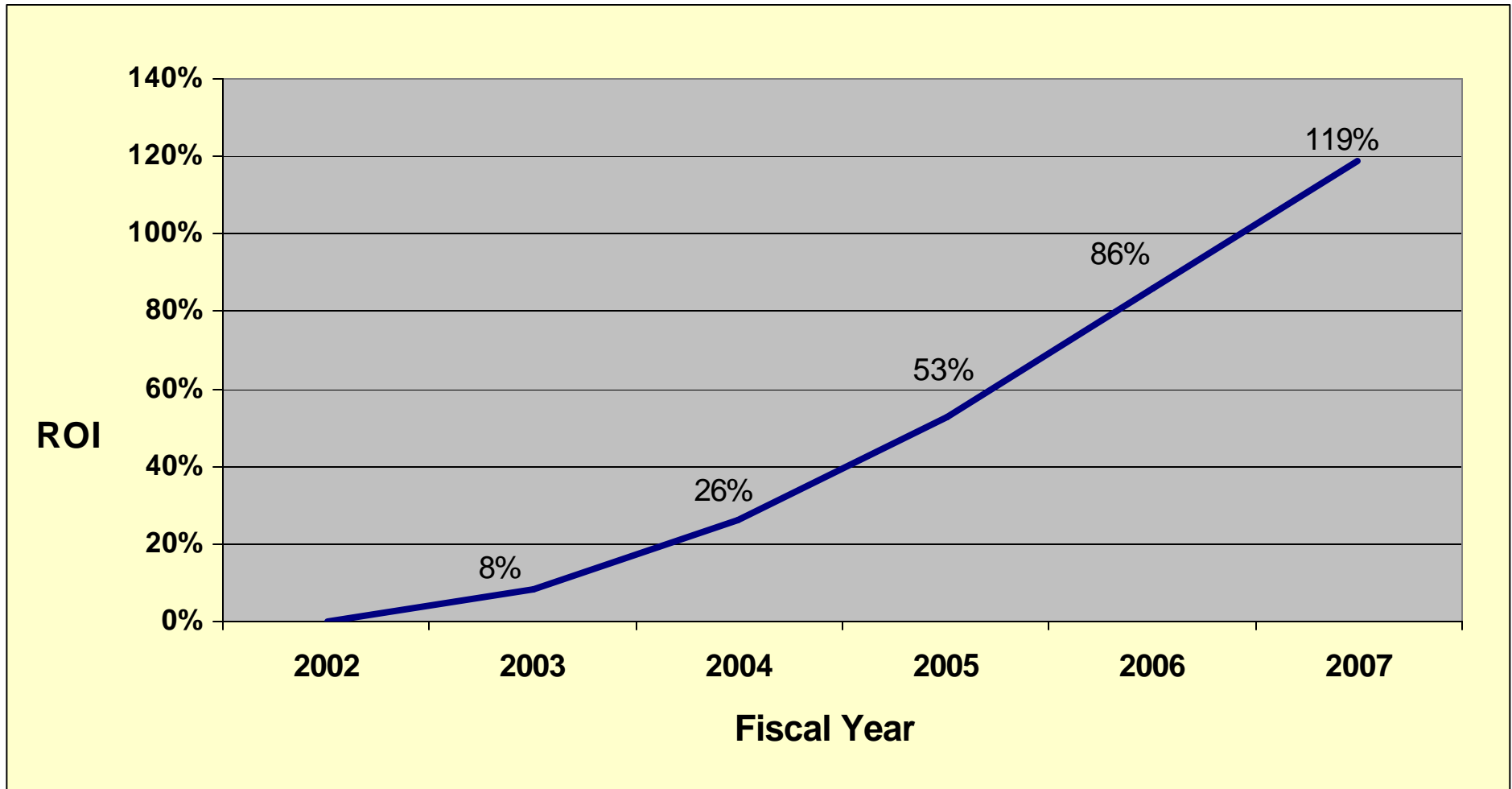


# EXAMPLE: INTEGRATED AVIATION CONFIGURATION MANAGEMENT



# **COST - BENEFIT ANALYSIS**

# EXAMPLE: NAVAIR ERP FY02 - FY07 RETURN ON INVESTMENT



Initial baseline return on investment and payback savings

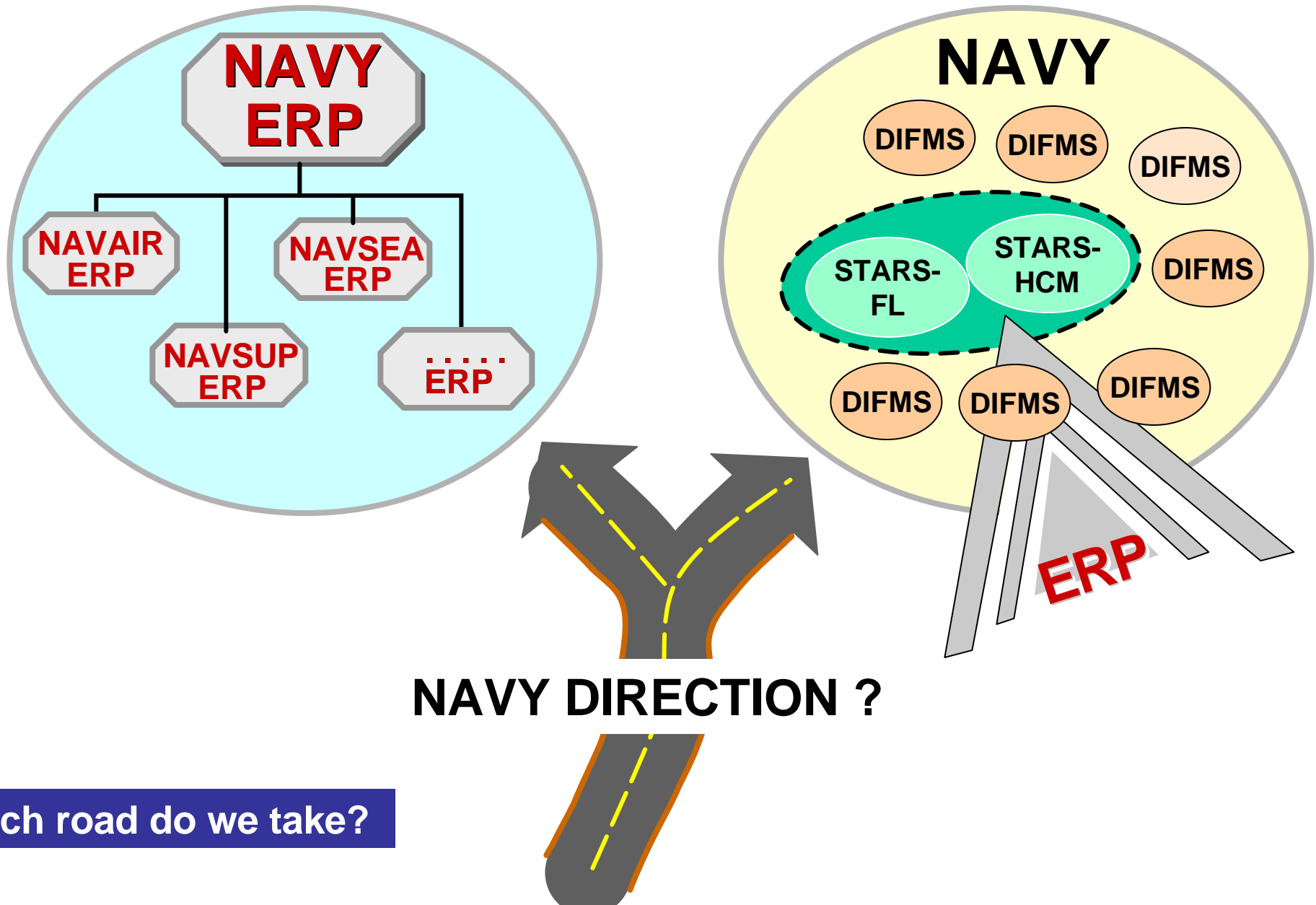
# **ERP ANTICIPATED ENTERPRISE-WIDE BENEFITS**

- **Lower information technology expense**
- **Improve financial management**
- **Improve inventory management**
- 
- **Increase labor efficiency**
- **Improve data integrity**
- **Increase readiness**
- **Enable regional maintenance**

# **INDUSTRY LESSONS LEARNED - - ONES WE ARE WATCHING CLOSELY**

- **Inadequate sponsorship**
- **Poor / slow decision making**
- **Poor / no scope definition**
- **Lack of cooperation between business areas / departments**
- **Poor use of consultants**
- **Inappropriate resources**
- **Unrealistic expectations**
- **Inadequate knowledge transfer to employees**
- **Poor project management**

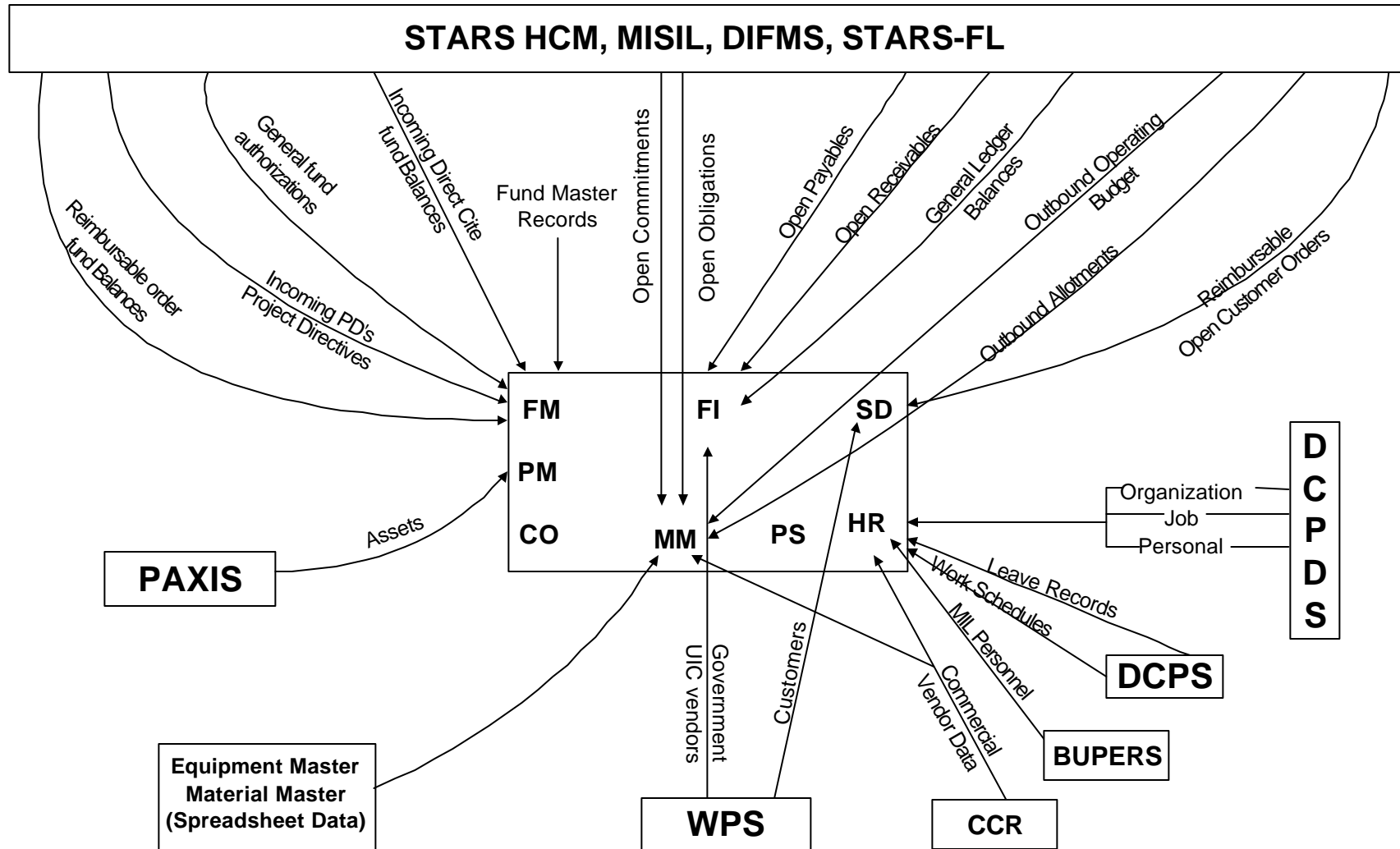
# THE CHALLENGE AHEAD



**BACK UPS**

# CONVERSIONS VERSION 1.0

Total Conversion Scope
12



# INTERFACES VERSION 1.0

Total Interface Scope  
 17

